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EXAMINER

BATURAY, ALICIA

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/895,047

Applicant(s)

CHANDRACHOOD, SANTOSH S.

Examiner

Alicia Baturay

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☒ Claim(s) 13, 14, 32, 33, 51, 52, 70 and 71 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12062004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-73 are pending.

#### ***Drawings***

2. The drawings are objected to because on Fig. 3B, the label for element 340 is misspelled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 8, 27, 46, and 65 recite the limitation “the first expected request.” There is insufficient antecedent basis for this limitation in the claim.
5. Claims 12, 31, 50, and 69 recite the limitation “the responses.” There is insufficient antecedent basis for this limitation in the claim.
6. Claims 14, 33, 52, and 71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Objections***

7. Claims 13, 32, 51, and 70 are objected to because they depend upon rejected claims.
8. Claims 14, 33, 52, and 71 are objected to because they depend upon rejected claims.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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10. Claims 1-3, 6-22, 25-41, 44-60, and 63-73 are rejected under 35 U.S.C. § 102(b) as being anticipated by Chen et al. (U.S. 6,076,107).

11. As to claim 1, Chen discloses a method for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the method comprising: populating a memory with prefetched response data based on whether one or more received requests matches a predetermined pattern, the pattern comprising one or more expected request and the periodicity of the one or more expected request (Chen, col. 6, lines 50-62), the response data comprising information prefetched from at least one subsystem on a managed network device; and sending a response comprising the prefetched response data if a received request matches the pattern and if said memory includes response data corresponding to the received request (Chen, col. 6, line 65-col. 7, line 7).

12. As to claims 2, 18, 21, 37, 40, 56, and 59, Chen discloses the invention substantially including where the one or more received requests comprise Simple Network Management Protocol (SNMP) requests (Chen, col. 6, lines 15-18); and the response comprises a SNMP response (Chen, col. 7, lines 5-7).

13. As to claims 3, 19, 22, 38, 41, 57, and 60, Chen discloses the invention substantially including where the SNMP requests comprise SNMP request Protocol Data Units (PDUs) (Chen, col. 6, lines 15-18); and the SNMP response comprises a SNMP response PDU (Chen, col. 7, lines 5-7).

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14. As to claims 6, 25, 44, and 63, Chen discloses the invention substantially including where the populating comprises populating the memory in response to the one or more received requests matching the pattern (Chen, col. 6, lines 50-62).
15. As to claims 7, 26, 45, and 64, Chen discloses the invention substantially including where populating comprises populating the memory in anticipation of the one or more received requests matching the pattern (Chen, col. 4, line 65-col. 5, line 3).
16. As to claims 8, 27, 46, and 65, Chen discloses the invention substantially including where the populating comprises populating the memory with prefetched response data for all expected requests in the pattern if a received request matches the first expected request in the pattern (Chen, col. 6, lines 50-62).
17. As to claims 9, 28, 47, and 66, Chen discloses the invention substantially including where the response data comprises information regarding a plurality of subsystems on the managed network device (Chen, Fig. 2; col. 2, lines 57-67).
18. As to claims 10, 29, 48, and 67, Chen discloses the invention substantially including where the pattern comprises a plurality of expected requests (Chen, col. 6, lines 60-62).
19. As to claims 11, 30, 49, and 68, Chen discloses the invention substantially including further comprising configuring the pattern before the populating (Chen, col. 6, lines 54-57). In order

for the SubAgent to issue a request to Instrumentation for retrieving an entire row, it must have the logic in place before it takes requests from the Manager.

20. As to claims 12, 31, 50, and 69, Chen discloses the invention substantially including where the populating comprises: prefetching response data for all expected requests in the pattern; creating responses for the expected requests; and storing the responses in the memory (Chen, col. 6, lines 50-62).

21. As to claims 13, 32, 51, and 70, Chen discloses the invention substantially including where the populating is performed periodically based on the periodicity such that valid prefetched response data is available upon receipt of a request for the response data (Chen, col. 7, lines 8-12).

22. As to claims 14, 33, 52, and 71, Chen discloses the invention substantially including where the prefetching comprises: examining data requests in the pattern; grouping the data requests according to the subsystem on the managed network device responsible for providing the requested data; requesting the grouped data from the subsystem responsible for providing the requested data; and receiving the grouped data (Chen, col. 3, lines 32-46).

23. As to claims 15, 34, 53, and 72, Chen discloses the invention substantially including further comprising indicating whether a response in the memory is valid based upon when the data for the response was collected (Chen, col. 7, lines 8-12).

24. As to claims 16, 35, 54, and 73, Chen discloses the invention substantially including where the sending further comprises sending the response if the prefetched response data is valid (Chen, col. 7, lines 8-12).
25. As to claim 17, Chen discloses a method for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the method comprising: determining whether a trigger request has been received, the trigger request matching a first request in a pattern, the pattern comprising at least one expected request; initiating periodic data collection if the trigger request is received, the data collection comprising populating a memory with response data corresponding to the at least one expected request, the response data comprising information obtained from at least one subsystem on a managed network device (Chen, col. 6, lines 50-62); and sending a response comprising the response data from the memory if a received request matches an expected request in the pattern and if the memory includes response data corresponding to the expected request (Chen, col. 6, line 65-col. 7, line 7).
26. As to claim 20, Chen discloses a program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the method comprising: populating a memory with prefetched response data based on whether one or more received requests matches a predetermined pattern, the pattern comprising one or more expected request and the periodicity of the one or more expected request (Chen, col.



6, lines 50-62), the response data comprising information prefetched from at least one subsystem on a managed network device; and sending a response comprising the prefetched response data if a received request matches the pattern and if the memory includes response data corresponding to the received request (Chen, col. 6, line 65-col. 7, line 7).

27. As to claim 36, Chen discloses the invention substantially including a program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the method comprising: determining whether a trigger request has been received, the trigger request matching a first request in a patterns, the pattern comprising at least one expected request; initiating periodic data collection if the trigger request is received, the data collection comprising populating a memory with response data corresponding to the at least one expected request, the response data comprising information obtained from at least one subsystem on a managed network device (Chen, col. 6, lines 50-62); and sending a response comprising the response data from the memory if a received request matches an expected request in the pattern and if the memory includes response data corresponding to the expected request (Chen, col. 6, line 65-col. 7, line 7).

28. As to claim 39, Chen discloses an apparatus for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the apparatus comprising: means for populating a memory with prefetched response data based on whether one or more received requests matches a predetermined pattern, the pattern comprising one or more

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expected request and the periodicity of the one or more expected request (Chen, col. 6, lines 50-62), the response data comprising information prefetched from at least one subsystem on a managed network device; and means for sending a response comprising the prefetched response data if a received request matches the pattern and if the memory includes response data corresponding to the received request (Chen, col. 6, line 65-col. 7, line 7).

29. As to claim 55, Chen discloses an apparatus for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the apparatus comprising: means for determining whether a trigger request has been received, the trigger request matching a first request in a pattern, the pattern comprising at least one expected request; means for initiating periodic data collection if the trigger request is received, the data collection comprising populating a memory with response data corresponding to the at least one expected request, the response data comprising information obtained from at least one subsystem on a managed network device (Chen, col. 6, lines 50-62); and means for sending a response comprising the response data from the memory if a received request matches an expected request in the pattern and if the memory includes response data corresponding to the expected request (Chen, col. 6, line 65-col. 7, line 7).

30. As to claim 58, Chen discloses an apparatus for predictively responding to network management data requests (Chen, col. 4, line 65-col. 5, line 3), the apparatus comprising: a request classifier to classify a request based on whether one or more received requests matches a predetermined pattern, the pattern comprising one or more expected request and

the periodicity of the one or more expected request; a lookahead processor coupled to the request classifier and operative to populate a memory with prefetched response data in response to a signal from the request classifier, the response data comprising information prefetched from at least one subsystem on a managed network device (Chen, col. 6, lines 50-62); an interfacier coupled to the lookahead processor and operative to interface with the one or more subsystem on the managed network device to provide the response data; and a sender coupled to the request classifier and operative to send a response comprising the prefetched response data if a received request matches the pattern and if the memory includes response data corresponding to the received request (Chen, col. 6, line 65-col. 7, line 7).

***Claim Rejections - 35 USC § 103***

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claims 4, 5, 23, 24, 42, 43, 61, and 62 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen and further in view of Case et al. ("Request for Comments: 1157").

33. As to claims 4, 23, 42, and 60, Chen discloses the use of a predetermined pattern comprising of one or more expected requests (Chen, col. 6, lines 50-62). But Chen does not expressly disclose what the pattern ID comprises of. However, Case does teach where the pattern is

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identified by a pattern ID; and the pattern ID comprises: a community string; a Network Management Station (NMS) IP address; and a NMS port address (Case, page 13, last paragraph- page 14, first paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chen and Case in order to minimize the amount of traffic generated by the network management function (Case, page 6, 5<sup>th</sup> paragraph).

34. As to claims 5, 24, 43, and 62, the combination of Chen and Case discloses the invention substantially including the pattern is identified by a pattern ID; and the pattern ID comprises a SNMP request ID (Case, page 18, "RequestID ::= INTEGER").

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

  
**HOSAIN ALAM**  
**SUPERVISORY PATENT EXAMINER**